UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,706	09/29/2003	Hye-Sook Hwang	0630-1851P	9257

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EXAMINER
ALI, FARHAD

ART UNIT	PAPER NUMBER
2146	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)
Office Action Summary	10/671,706	HWANG, HYE-SOOK
	Examiner	Art Unit	
	FARHAD ALI	2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>13 December 2007</u>.

2a)☒ This action is FINAL.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-16</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-16</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>29 September 2003</u> is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Zintel (US 6,779,004 B1) in view of Meyerson (US 6,941,356 B2).

Claim 1

Zintel teaches a selective device recognition apparatus in a UPnP based home

network, the apparatus comprising: a network stream processing unit configured to

parse a device characteristic data of a device and to read a network transmission

possible identifier and a device characteristic identifier **(Column 7 Lines 8-23 "User**

Control Point" and "The set of modules that enable communication with a UPnP

Controlled Device…"; and see Table on column 14 "Description Client" which

"receive description documents").

Zintel does not specifically disclose a network transmission judging unit

configured to compare the read network transmission possible identifier with a preset

network transmission possible identifier, to judge whether to perform network

transmission of the device characteristic data according to a result of the comparison,

and to selectively transmit the device characteristic data when the comparison result of the judging unit indicates the network transmission of the device characteristic data should be performed.

Meyerson teaches **"a method and structure for a primary device adapted to communicate with secondary devices. The primary device has a central processing unit, a transceiver connected to the central processing unit which is adapted to transmit signals to and from the secondary devices and a user interface. The central processing unit automatically establishes communications with the secondary devices through the transceiver by sequentially (or in parallel) attempting communication with the secondary devices using a plurality of known communication protocols until communications are established, and the central processing unit changes the user interface depending upon which secondary devices are in communication with the primary device" (abstract).**

It would have been obvious to one of ordinary skill in the art to utilize Zintel's UPnP adapter with Meyerson's method for automatically establishing communication with a UPnP device. Zintel teaches a general UPnP network and adapter including a Control Point (CP) and secondary devices. Meyerson teaches a method that enables a CP to automatically establish communications with these secondary devices through the use of advanced searching methods, and an ability to choose which devices and information are displayed to the user. It is desirable to automate functions of a Control Point, along with adding more advanced methods of finding and communicating with secondary devices.

Claim 2

Zintel teaches the apparatus of claim 1, further comprising:

a network interface <u>configured to receive the</u> device characteristic data transmitted from a home network device **(Column 7 Lines 8-23 "User Control Point" and "The set of modules that enable communication with a UPnP Controlled Device…")**;

and a transmission <u>judgment</u> table in which <u>the</u> network transmission possible identifier is matched-recorded <u>with the</u> device characteristic identifier read from the network stream processing unit **(Column 9 Lines 37-44 "Service State Table (SST)" and "A logical table consisting of rows of [Variable, Type, Legal Values, Default Value, Current Value] that represents the current electrical, mechanical and/or logical state of a Service.")**.

Claim 3

Zintel teaches the apparatus of claim 1, wherein the network stream processing unit includes:

a preprocessor <u>configured to parse</u> the device characteristic data;

a buffer manager <u>configured to</u> temporally <u>store</u> the device characteristic data parsed in the preprocessor in <u>a</u> buffer and <u>to output</u> a registry signal corresponded thereto;

and an identifier reader <u>configured to search</u> the device characteristic data

temporally stored in the buffer according to the registry signal outputted from the buffer

manager and <u>read the</u> device characteristic identifier and <u>the</u> network transmission

identifier **(See Figure 21. "Processing Unit" "RAM" "LAN" and "Applications").**

Claim 4

Zintel teaches the apparatus of claim 3, wherein the preprocessor performs

parsing of the device characteristic data by device characteristic data units divided by a

token(/) **(See Figure 16 XML data in token format)**.

Claim 5

Zintel teaches the apparatus of claim 1, wherein the network transmission

judging unit includes:

a device characteristic identifier detecting module <u>configured to detect</u> a device

characteristic identifier <u>that is the</u> same with the device characteristic identifier read from

the network stream processing unit;

a network transmission possible identifier comparing module <u>configured to</u>

<u>compare</u> the network transmission possible identifier detected by the device

characteristic identifier detecting module with the network transmission possible

identifier read from the network stream processing unit; and

a transmission judging module <u>configured to judge</u> whether it is possible to

perform <u>the</u> network transmission of <u>the device</u> characteristic data indicated by the

device characteristic identifier according to the comparison result **(Column 11 Lines14-15 "Discovery Client" is "The module that runs in a User Control Point that initiates SSDP queries" and Column 14 Line 9 "Description Client" and see Figure on column 14 "Description Client" which "receive description documents" and Column 7 Lines 8-23 "User Control Point" and "The set of modules that enable communication with a UPnP Controlled Device…")**.

<u>Claim 6</u>

Zintel teaches a selective device recognition method in a UPnP based home network, <u>the method</u> comprising:

receiving <u>and parsing</u> a device characteristic data **(see Figure on column 14 "Description Client" which "receive description documents")**;

reading a device characteristic identifier and a network transmission possible identifier <u>from the parsed device characteristic data</u> **(Column 11 Lines14-15 "Discovery Client" is "The module that runs in a User Control Point that initiates SSDP queries" and Column 9 Lines 6-8 "Description Document" "A structured unit of data that is used by a User Control Point or UPnP Bridge to learn the capabilities of a Controlled Device")**.

Zintel does not specifically disclose comparing the read network transmission possible identifier with a <u>preset</u> network transmission possible identifier, judging whether <u>to perform</u> network transmission of <u>the device</u> characteristic data corresponded to the read device characteristic identifier is performed according to <u>a result of the</u>

comparison, and to selectively transmitting the device characteristic data when the

comparison result of the judging unit indicates the network transmission of the device

characteristic data should be performed.

Meyerson teaches **"a method and structure for a primary device adapted to**

communicate with secondary devices. The primary device has a central

processing unit, a transceiver connected to the central processing unit which is

adapted to transmit signals to and from the secondary devices and a user

interface. The central processing unit automatically establishes communications

with the secondary devices through the transceiver by sequentially (or in parallel)

attempting communication with the secondary devices using a plurality of known

communication protocols until communications are established, and the central

processing unit changes the user interface depending upon which secondary

devices are in communication with the primary device" (abstract).

It would have been obvious to one of ordinary skill in the art to utilize Zintel's

UPnP adapter with Meyerson's method for automatically establishing communication

with a UPnP device. Zintel teaches a general UPnP network and adapter including a

Control Point (CP) and secondary devices. Meyerson teaches a method that enables a

CP to automatically establish communications with these secondary devices through

the use of advanced searching methods, and an ability to choose which devices and

information are displayed to the user. It is desirable to automate functions of a Control

Point, along with adding more advanced methods of finding and communicating with

secondary devices.

Claim 7

Zintel teaches the method of claim 6, wherein parsing the received device characteristic data is performed by device characteristic data units divided by a token(/) or parsing the received device characteristic data is performed by inserting a null string after the token in the parsing step **(Column 33 Lines 36-42 "SzHeaders [in] null-terminated text string containing the headers for the event, each separated by CRLF. SzEventBody [in] null-terminated text string containing the body of the event message")**.

Claim 8

Zintel teaches the method of claim 6, wherein the device characteristic data is a request message for UPnP device recognition in a UPnP CP (control point) device **(Column 11 Lines14-15 "Discovery Client" is "The module that runs in a User Control Point that initiates SSDP queries")**.

Claim 9

Zintel teaches the method of claim 8, wherein the request message includes inherent network transmission possible identifier information per each device characteristic identifier **(Applicant admits inherency in the claim).**

Claim 10

Zintel teaches the method of claim 8, wherein the UPnP device includes the network transmission possible identifier, and recognition is judged by the UPnP CP device **(See Figure 10 and see Table on column 14 "Discovery Client" "Discovery Server" "Description Client" "Description Server" and "Control Server")**.

Claim 11

Zintel teaches the method of claim 8, wherein the UPnP CP device and the UPnP device exist in a same local network **(See Figure 2 User Control Point and Controlled Device)**.

Claim 12

Zintel teaches the method of claim 6, wherein the device characteristic data is an advertisement message for notifying a UPnP device itself **(see Figure on column 14 "Description Server" which "Provide description documents")**.

Claim 13

Zintel teaches the method of claim 12, wherein the advertisement message includes inherent network transmission possible identifier information per each device characteristic identifier **(Applicant admits inherency in the claim)**.

Claim 14

Zintel teaches the method of claim 6, wherein the network transmission possible identifier of the read device characteristic identifier is compared with a network transmission possible identifier recorded in a transmission judgment table in the network transmission judging step **(Column 9 Lines 37-44 "Service State Table (SST)" and "A logical table consisting of rows of [Variable, Type, Legal Values, Default Value, Current Value] that represents the current electrical, mechanical and/or logical state of a Service.").**

Claim 15

Zintel teaches the method of claim 6, wherein the network transmission judging step includes:

outputting a request message to a UPnP CP (control point) device for a message not having network transmission possible identifier information;

and sequentially comparing each network transmission possible identifier with each network transmission possible identifier of a UPnP device for a message having network transmission possible identifier information and transmitting a response message to the UPnP CP device according to the comparison result **(Column 21 Lines 5-14 "User Control Points 104 are not required to have any prior knowledge of the SCPs 402 required to control the Services on the various devices. Therefore, a Controlled Device or Bridge must be able to describe to a User Control Point the protocols required to control its Services, such that the User Control Point will be able to implement these protocols dynamically").**

Claim 16

Zintel teaches the method of claim 6, wherein the network transmission judging step includes:

recognizing a UPnP device by a general recognition process for a message not having the network transmission possible identifier information; and

sequentially the comparing network transmission possible identifier information with a network transmission possible identifier of a UPnP CP device when the network transmission possible identifier information is detected and recognizing a pertinent device and a service according to the comparison result **(Column 21 Lines 5-14 "User Control Points 104 are not required to have any prior knowledge of the SCPs 402 required to control the Services on the various devices. Therefore, a Controlled Device or Bridge must be able to describe to a User Control Point the protocols required to control its Services, such that the User Control Point will be able to implement these protocols dynamically")**.

Response to Arguments

3.   Applicant's arguments with respect to claim 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to FARHAD ALI whose telephone number is (571)270-

1920. The examiner can normally be reached on Monday thru Friday, 7:30am to

5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey C. Pwu can be reached on (571) 272-6798. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Farhad Ali/
Examiner, Art Unit 2146

/JEFF PWU/
Supervisory Patent Examiner, Art Unit 2146